

PRINTER RUSH
(PTO ASSISTANCE)

Application : 091455574 Examiner : Johnson GAU : 1725
From : J. Black Location : IDC FMF FDC Date : 4/20/05
Tracking # : 06092048 Week Date : 4/14/05

DOC CODE	DOC DATE	MISCELLANEOUS
<input type="checkbox"/> 1449	_____	<input checked="" type="checkbox"/> Continuing Data
<input type="checkbox"/> IDS	_____	<input type="checkbox"/> Foreign Priority
<input type="checkbox"/> CLM	_____	<input type="checkbox"/> Document Legibility
<input type="checkbox"/> IIFW	_____	<input type="checkbox"/> Fees
<input type="checkbox"/> SRFW	_____	<input type="checkbox"/> Other
<input type="checkbox"/> DRW	_____	
<input type="checkbox"/> OATH	_____	
<input type="checkbox"/> 312	_____	
<input type="checkbox"/> SPEC	_____	

[RUSH] MESSAGE:

Please add continuing data to specification so as
to match palm/bib sheet.

Thank you!

[XRUSH] RESPONSE:

See Attachment

INITIALS: FD



9a Data Sheet



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

09/455,574

SERIAL NUMBER 09/455,574	FILING DATE 12/06/1999 RULE -	CLASS 442	GROUP ART UNIT 1771	ATTORNEY DOCKET NO. 702/991620
------------------------------------	---------------------------------------------------	---------------------	-------------------------------	------------------------------------------

APPLICANTS

AALBERTUS PIETER KROESBERGEN, VEENENDAAL, NETHERLANDS;

**** CONTINUING DATA *******

THIS APPLICATION IS A CON OF 08/442,417 05/16/1995 ABN
WHICH IS A DIV OF 08/875,237 09/09/1997 PAT 5,998,312
WHICH IS A 371 OF PCT/NL96/00039 01/23/1996
AND A CON OF 08/442,417 05/16/1995 ABN

**** FOREIGN APPLICATIONS *******

NETHERLANDS 9500118 01/23/1995
NETHERLANDS 1000572 06/15/1995
NETHERLANDS NL 9500118 01/23/1995
NETHERLANDS 9500118 01/23/1995
NETHERLANDS 1000572 06/15/1995

IF REQUIRED, FOREIGN FILING LICENSE GRANTED
** 01/11/2000

Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no	STATE OR COUNTRY NETHERLANDS	SHEETS DRAWING 1	TOTAL CLAIMS 30	INDEPENDENT CLAIMS 2	
35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance					
Verified and Acknowledged	Examiner's Signature	Initials			

ADDRESS

RUSSELL D ORKIN
700 KOPPERS BUILDING
436 SEVENTH AVENUE
PITTSBURGH, PA 152191818

TITLE

SUBSTRATE WITH SUPER-ABSORBENT MATERIAL, METHOD FOR MANUFACTURE THEREOF AND USE

FILING FEE RECEIVED 940	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:	<input type="checkbox"/> All Fees
		<input type="checkbox"/> 1.16 Fees (Filing)
		<input type="checkbox"/> 1.17 Fees (Processing Ext. of time)
		<input type="checkbox"/> 1.18 Fees (Issue)
		<input type="checkbox"/> Other _____
		<input type="checkbox"/> Credit _____

PATENT APPLICATION
Atty. Docket No. 702/991620

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :

AALBERTUS PIETER KROESBERGEN : SUBSTRATE WITH
Serial No. Not Yet Assigned : SUPER-ABSORBENT MATERIAL,
METHOD FOR MANUFACTURE
Filed Concurrently Herewith : THEREOF AND USE

Pittsburgh, Pennsylvania
December 6, 1999

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington DC 20231

Sir:

Prior to initial examination, please amend the above-
identified patent application as follows:

IN THE SPECIFICATION:

Page 1, after the title and before line 1, insert the
following:

--This is a division of U.S. Patent Application Serial
No. 08/875,237, filed September 9, 1997, ^{now US Pat 5,998,312}

BACKGROUND OF THE INVENTION1. Field of the Invention --

Page 1, before line 6, insert the following heading:

2. Description of the Related Art --

Page 2, before line 8, insert the following heading:

SUMMARY OF THE INVENTION --

Page 2, before line 22, insert the following:

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 shows a schematic diagram of preparatory steps
for manufacturing a super-absorbent powder according to prior
art; and

09/455,574

**SUBSTRATE WITH SUPER-ABSORBENT MATERIAL, METHOD FOR
MANUFACTURE THEREOF AND USE**

Ins A1 >
The present invention relates to a substrate provided with a super-absorbent material, to a method for the manufacture thereof, a method for manufacturing the super-absorbent material, in addition to the use of the substrate in different products.

ns A2 >
Super-absorbent materials used for a variety of applications have existed for decades. Such super-absorbent materials are capable of binding a multiple of their own weight in liquid, particularly water, sometimes up to five hundred times as much.

10455574-120699
A3 >
The super-absorbent capacity of such materials is based on swelling. The materials are at least partially cross-linked polymer chains containing a large number of COOH groups. Through contact with water or an aqueous liquid hydrogen atoms will split off and COO⁻ groups will be formed. These negatively charged carboxylate groups repulse each other, whereby the cross-linked polymer forms a three-dimensional network, in which the water molecules are as it were captured. The water molecules are held in the super-absorbent material by means of hydrogen bridges. The (partial) cross-linking of the material is essential for the effectiveness thereof, since "separate" polymer chains would simply dissolve in the liquid instead of absorbing it.

ub C1 75
~~Super-absorbent materials occur as powders or fibres. The advantage of powders is that they have a markedly higher absorption capacity than fibres due to their significantly larger surface area. Super-absorbent fibres are moreover more expensive.~~

30 Powders are usually applied to a substrate, which in turn is further processed into the end product. In particular cases powders are also directly processed. The great drawback of powder however is that it causes dusting and dust nuisance both in the manufacture of

35 substrates coated with powder and in the processing of